

REMARKS/ARGUMENTS

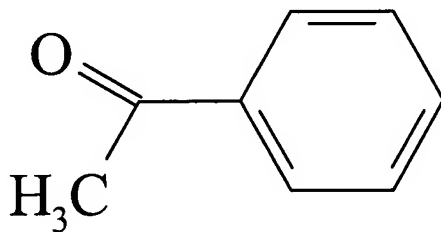
Reconsideration of this application is requested. Claims 1-22 will be active in the application subsequent to entry of this Amendment. Of these, claims 11, 12, 21 and 22 are directed to non-elected subject matter and thus are or will be withdrawn from consideration.

Counsel affirms the election of claims 1-10 in response to an oral requirement for restriction made on June 6, 2007.

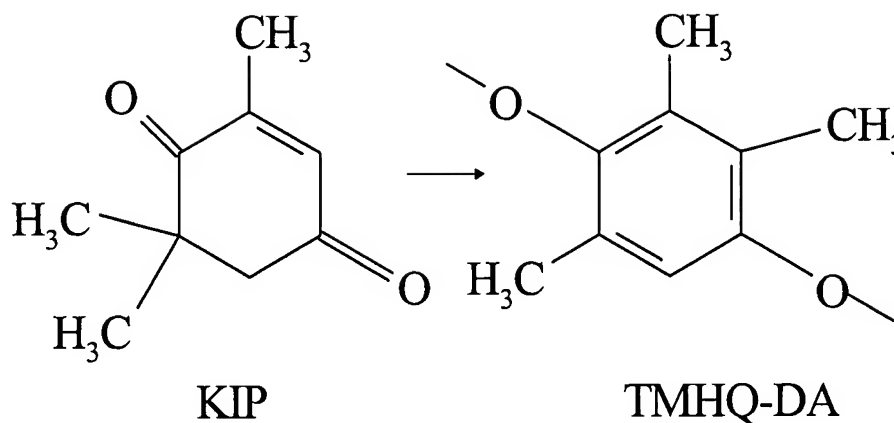
Claims 4-7, 11 and 12 have been amended to place the "preferably" aspect of these claims into separate dependent claims. Accordingly, claims 13, 14 and 15 are based on original claim 4, claims 16 and 17 are based upon original claim 5, claim 18 on claim 6, claims 19 and 20 on claim 7 and claims 21 and 22 on withdrawn claims 11 and 12, respectively.

The sole issue raised in the outstanding Official Action is the patentability of all of the then-pending claims over the Schneider et al article in view of published U.S. application 2005/0176994 to Itoh et al. Applicants have carefully studied the examiner's comments but submit that the combination of references is totally retrospective in nature and appears to be driven by the subject matter of the claims under review and not a more general consideration of the relevant prior art.

The Schneider article is concerned with the use of Nafion catalysts in various industrial settings in particular for the Friedel-Crafts alkylation. A Friedel-Crafts reaction is between an aromatic compound in an acid or acid anhydride, for example the reaction between acetic acid and benzene to give a ketone



In contrast, in the present application applicants use acetic acid anhydride to produce an ester and the catalyst is accomplishing the Wagner-Meerwein reaction namely the rearrangement of a methyl group. Indeed, the starting molecule is not an aromatic molecule but instead ketoisophorone (KIP) which, via rearrangement, yields 2,3,5-trimethylhydroquinone dianhydride or TMHQDA.



Thus even if one were to argue, as in the current Official Action, that the Itoh et al patent demonstrates the interchangeability of Nafion in a Friedel-Crafts environment, applicants are not employing a Friedel-Crafts reaction. Simply put, it would not be foreseen by one having ordinary skill in the art that an indium salt catalyst would work so well in a Wagner-Meerwein environment with the reduction of unwanted side products where the hydroxy groups are in an ortho position and which cannot be easily separated. This is demonstrated in the example on page 6 of the description as to purity of product versus a range of indium-based catalysts. Accordingly, claim 1 is not suggested by the combination of these references and indeed if one were to combine with them it would only be done so with respect to a Friedel-Crafts reaction and not the type of reaction of concern in the present application.

For the above reasons it is respectfully submitted that the claims of this application define inventive subject matter. Reconsideration and allowance are solicited. Should the examiner require further information, please contact the undersigned.

BONRATH et al
Appl. No. 10/582,672
February 8, 2008

Respectfully submitted,

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